

10GigaMUX

Description

10GigaMUX is an interesting aggregation modular solution that allows the transportation of GbE circuits without the need of metro-CWDM solutions with a consequent reduction of operational costs.

10GigaMUX The card is targeted at providing wholesale services of GbE transportation where the client is expected to increase its connectivity needs in the future. Its scalable architecture only requires the insertion of an SFP module to provide a new user's circuit.

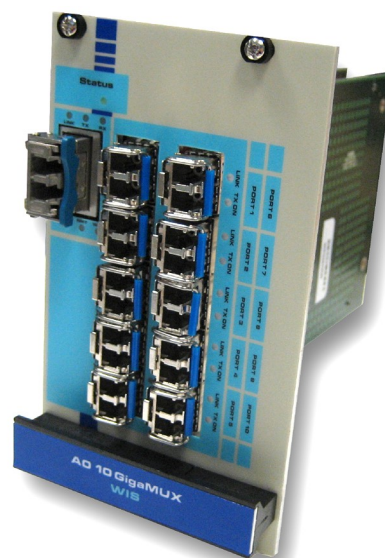
10G WIS aggregation

The 10GigaMUX transport interface can be configured to work as 10G LAN and 10G WIS. In the latter mode, the card generates a header structure equivalent to an STM-64 frame.

When this flow is inserted into an equipment of DWDM transport, its transponder detects a genuine SDH signal and allows the monitoring and supervision of bytes B1 and B2 of the frame, checking the integrity of the signal end-to-end.

When 10GigaMUX works in WIS mode, the aggregate maximum capacity is 9 GbE circuits. The aggregation of 10 circuits is also possible, but the card will be configured in "flow control", limiting the bandwidth of all circuits in congestion conditions.

10GigaMUX occupies a width of three slots in a MiniSAE chassis (3/4/5UA) high power and MetroSAE. Both the 10G interfaces and the GbE interfaces can be colored in C and in DWDM, in order to attack directly the transponders as required, thus increasing the transport capacity of the solution. 10GigaMUX is a manageable via SNMP and via TRI.OS.



Features

Modular aggregator

10GigaMUX can add a maximum of 10 GigabitEthernet circuits over a 10G link with a high degree of transparency.

SFP(GbE) and XFP interfaces

Support for a wide range of modular GbE interfaces (up to 200Km) and up to 80 km in 10GbE.

Configurable LAN/WIS mode

The 10G frame can be selected between 10G LAN/WAN and 10G WIS. In this last mode it is possible to transparently add up to 9 channels.

STM-64 Compliant

In 10G WIS mode 10GigaMUX generates a "like-STM-64" frame. This pattern is recognized by WDM transponders as if it were a SDH frame, allowing the transport equipments the usual calculation of statistical B1, B2 errors, etc.

Fiber monitoring

10GigaMUX supports the advanced reading of the optical parameters of the modules: power emitted and received, intensity of polarization (detects premature aging of the laser) and operating temperatures.

Interface cuts

10GigaMux spread the interface cuts to the remote equipment, facilitating the convergence of the Spanning Tree and LACP protocols.

Technical Specifications

General Features

- Aggregation of up to 10 circuits on a 10G GigabitEthernet link.
- 10G LAN/WAN and 10G WIS configurable modes (transparent aggregation of up to 9 channels in the latter).
- 10G WIS mode generates a "STM-64 like" frame recognized by WDM transponders as a SDH frame, allowing calculation of error statistics of B1, B2, etc.
- Supports reading of advanced settings of the optical modules.
- Spreads interface's cuts to the remote equipments, facilitating the convergence of the Spanning Tree and LACP protocols.
- Remote management via SNMP and TRI.OS.
- Occupies 3 slots in MiniSAE (3/4/5UA) high-powered chassis and MetroSAE chassis.

Interfaces

- 1 10GbE operator's interface. XFP Modular. Colourable. Distances up to 80Km.
- 10 GbE client's interfaces. Modular SFP. Colourable. Distances up to 200Km.

Applications

- Replacement of metro-CWDM equipments in wholesale Gigabit Ethernet transport services.
- GbE Channel transportation over dark fiber without the use of statistical multiplexing for up to 80km.
- Using an additional 10G AO 1+1 card that allows the establishment of aggregated and diversified 10G routes.
- In band managed links requiring spread of interface cuts to facilitate the convergence of Spanning Tree and LACP protocols.

Optical XFP modules options

	1.64.1r 500m MM	1.64.1r 10Km	S.64.2 40Km	L.64.2 80Km	CWDM DWDM
Emitted power (Pout)	-6 dBm	-6 dBm	-5 dBm	-2 dbm	Consultar las lambdas y rangos dinámicos disponibles
Sensibility (S)	-11 dBm	-14 dBm	-18 dBm	-26dBm	
Wavelength	1310nm	1310nm	1550 nm	1550 nm	



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